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ABSTRACT

This booklet provides information intended to contribute to the business community's knowledge about major issues and goals of teacher education. In addition, the booklet offers specific suggestions on ways corporate funders, concerned about the quality of classroom teachers, can develop and support appropriate projects to promote better teacher preparation. Business leaders can: (1) help design more effective general education curricula; (2) make sure teachers know a variety of ways to teach; (3) create a model teacher education program; (4) recruit top-quality students; and (5) link teacher education with school reform. Specific strategies which are discussed include: helping to create effective clinical schools; providing scholarships and fellowships to future teachers; developing new teaching assessment models; setting up an individual partnership program between employees and teacher education programs; and developing case studies for future teachers. (IAH)

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WHAT BUSINESS LEADERS CAN DO TO HELP CHANGE TEACHER EDUCATION

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ADVANCING THE AGENDA FOR TEACHER EDUCATION IN A DEMOCRACY: A GUIDE FOR BUSINESS LEADERS

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WHAT BUSINESS LEADERS CAN DO TO HELP CHANGE TEACHER EDUCATION

by Diana W. Rigden, Council for Aid to Education

ADVANCING THE AGENDA FOR TEACHER EDUCATION IN A DEMOCRACY:

A GUIDE FOR BUSINESS LEADERS

The issuance of John I. Goodlad's book, *Teachers for Our Nation's Schools*, is a milestone in the continuing dialogue on reform in teacher education. Accompanying this volume are four guides to illustrate specific actions for renewing the education of educators simultaneously with reforming the nation's schools. The guides grew out of a project, Advancing the Agenda for Teacher Education in a Democracy, sponsored by the American Association of Colleges for Teacher Education, the Center for Educational Renewal at the University of Washington, and the Education Commission of the States. The production and printing of the guides in this series were underwritten by grants from the Exxon Education Foundation and Southwestern Bell Foundation. The four guides are as follows:

- *What Business Leaders Can Do To Help Change Teacher Education*
- *What College and University Leaders Can Do To Help Change Teacher Education*
- *What School Leaders Can Do To Help Change Teacher Education*
- *What State Leaders Can Do To Help Change Teacher Education*

These foundations and others have provided substantial support for Dr. Goodlad's effort. In 1990, the Exxon Education Foundation alone contributed $ 1.125 million in grants toward the Education of Educators Project.

The opinions, conclusions, and recommendations expressed in this guide do not necessarily reflect the views or opinions of the American Association of Colleges for Teacher Education or the other groups listed above. The AACTE does not endorse or warrant this information. The AACTE is publishing this document to stimulate discussion, study, and experimentation among educators. The authors were encouraged to express their judgment freely. The reader must evaluate this information in light of the unique circumstances of any particular situation and must determine independently the applicability of this information thereto.

Copies of the guides in the series, *Advancing the Agenda for Teacher Education in a Democracy*, may be ordered from:
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ADVANCING THE AGENDA FOR TEACHER EDUCATION

Since the early 1980s, the United States has engaged in one of the most intensive periods of school reform in its history, and at this juncture, it appears the reform effort will continue for many years.

Driving this reform movement are both economic and demographic forces. On the economic front, this nation's young people must meet much higher educational standards if the United States is to remain competitive in the international marketplace. From a demographic perspective, the growing population of poor and underprivileged children, many of whom are minority, will be unable to participate in mainstream society unless they can be reached and educated by the public school system. Traditional schooling methods, whatever their past successes, are incapable of producing a work force for today's technological workplace and of meeting the educational needs of children whose homes and communities, at best, fail to complement—and at worst, actively undermine—the efforts of educators.

Given these circumstances, the education community, with the support, encouragement, and occasional prodding of government and business leaders, has begun to restructure schools so that they do a better job of educating all children. A few strategies are producing real changes. In most restructured schools, for example, classes are considerably smaller and centered on active learning. Students take more initiative—working in teams, writing reports, making presentations, conducting research, questioning assumptions, and learning to develop and support their own ideas. Their teachers direct, coach, lecture, and stimulate, until every student successfully masters the work.

SCHOOL REFORM AND THE REFORM OF TEACHER EDUCATION

Despite these signs of progress, many classroom teachers still teach by lecturing passive students or assigning exercises from textbooks. No effort to restructure schooling can succeed without also changing how teachers teach, and how they learn to teach. For research on teaching indicates that even when given the opportunity, few teachers seem prepared to change the way they teach or to try more active learning strategies.

During this decade, schools will hire two million new teachers. How well teacher education programs select, educate, and introduce these people into the schools (to say nothing of how well the schools renew those teachers who remain in the system) may be the most important factors in the success or failure of public school reform. For without well-educated and freshly motivated teachers, school reform will not succeed.

In recent years, many states have become involved in teacher education reform—instituting new regulations, requiring curricular changes (such as a liberal arts major for future teachers and a fifth year for them to learn the art and science of teaching), and mandating alternative routes to certification. More and more policymakers are exploring ways to improve the quality of teacher education programs. While states certainly have a role in licensing teachers and protecting the public's interest, some of the actions of legislatures and of boards of education have hindered, not furthered, the cause of reform.

In the two years between 1986 and 1988, standards were increased in 26 states for admission to teacher education programs and certification tests were required for entry-level teachers. Thirty-two states changed the curricula for teacher education by requiring subject-area majors, and several states proposed requiring a master's degree of everyone wishing to teach. Eleven states developed alternative certification routes to provide easy access to teaching careers for professionals in other fields. At present, certification standards are being reviewed in many states, and work is under way to develop better means of assessing both academic expertise and effective teaching.

EFFECTIVE TEACHER PREPARATION FOR RESTRUCTURED SCHOOLS

These and other developments are promising, but thus far, genuine reform remains more conceptual than actual. Consensus has yet to emerge regarding a redesign of teacher education, partly because of a lack of understanding—firmly grounded in research—of existing practices in teacher education programs.

John I. Goodlad's latest book, *Teachers for Our Nation's Schools*,* offers the context that is needed to begin the change process. This broad, systematic study of teacher education programs in the nation's colleges and universities identifies structural weaknesses that impair many teacher education programs, describes essential elements for effective programs, and provides a blueprint for the simultaneous renewal of schools and the education of educators.

Reading Goodlad's report, one gains a sense of how complex the problems are of reforming teacher education. Using his findings and those of other researchers, business leaders can discuss ways to assist with teacher education reform by focusing on the following essential characteristics of an ideal teacher education program.

1. Future teachers must receive an improved general education.

In recent years college-level general education requirements and courses have been heavily criticized as inadequate. A 1988-89 survey by the National Endowment for the Humanities, for example, reveals that students can graduate from 38 percent of the nation's colleges and universities never taking a history course, from 45 percent without studying literature, from 77 percent without studying a foreign language, from 41 percent without taking mathematics, and from 33 percent with no study of the natural or physical sciences.

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* Goodlad, John I. 1990. *Teachers for Our Nation's Schools*. San Francisco: Jossey-Bass.

If these are general requirements for all students, what does this mean for future teachers? Many future teachers graduate and join the work force poorly prepared in basic academic subjects. The nation cannot expect teachers with the barest minimum in, say, mathematics and science to equip students for a role in a high-technology society—or to nurture in students the belief that every student, regardless of sex or race, can acquire quantitative skills. Likewise, if teachers do not learn to read critically and write a cogent, coherent paragraph or letter, they cannot be expected to teach their students the art of clear thinking and communication.

2. Future teachers must learn a variety of ways to teach their students.

When one looks carefully at teaching and learning, two things become apparent: Not all people learn in the same way, and different subjects require different methods of teaching. Successful teachers keep students enthusiastic about learning by varying the way materials are presented. For example, sometimes a teacher engages students in hands-on activities, and at other times, emphasizes in-depth reading and discussion.

Educational research, both theoretical and practical, has made great strides in recent years in identifying successful strategies for teaching diverse groups of people and various academic subjects. Such strategies include effective techniques for observing and diagnosing student abilities, planning and managing programs and resources, communicating with peers and parents, and evaluating student achievement and instructional effectiveness. The next steps are to apply this research in the classrooms of both the nation's children and their future teachers, and to continue further research.

Helping teachers develop an array of teaching strategies is one of the pressing goals of school reform. Teacher education programs must exhibit this broad array of strategies to future teachers, and not leave them to learn through trial and error on the job.

A related problem concerns conditions in the schools. Even if future teachers were to learn effective teaching strategies in their teacher education programs, they often would

find their innovative ideas stifled by tradition-bound colleagues in the schools and by system regulations. This problem illustrates Goodlad's point that teacher education reform must occur simultaneously with school reform.

3. A core group of academic and clinical faculty must be assigned responsibility for developing an effective teacher education program.

Teacher education is rarely considered a priority on college campuses, nor typically, do most institutions assign an identifiable group of faculty the responsibility for designing and implementing the teacher education program. The result is an incoherent, diffused course of study for future teachers.

When restructuring its teacher education program, a college or university must recruit and support a core faculty, drawn from the college as well as the schools, and give this group decision-making authority. The college or university also must establish for the group a clear organizational identity and a constancy of budget and personnel.

4. Students must be recruited into teacher education because of both their commitment to teaching and society's goals for education.

Admission to teacher education programs is not systematically related to the goals of teacher preparation. Too often students are allowed to pursue education majors without demonstrating their suitability for or commitment to careers in teaching. Recruitment and selection programs also must consider how a democratic nation's economic and social goals relate to education. For example, special attention must be paid to recruiting and graduating more science and mathematics teachers and more minority teachers.

Two trends are of concern with regard to minority teachers: First, their number is dramatically declining while the number of minority children in public schools is swelling, and second, many of these minority students are poor and disadvantaged. These trends make educational intervention and compensatory programs essential at every level of schooling,

from preschool onward. Unless such programs are instituted, the higher standards to which all teachers will be held will reduce still further the proportion of minority teachers.

5. The number of students accepted into a teacher education program must not exceed the space available for clinical experience.

At many institutions, more students are admitted to teacher education programs than can be provided with high-quality, closely supervised clinical experiences. This institutional practice must stop, even if it means lost tuition revenue for the institution.

6. Teacher education must be linked closely with teaching practice, especially in restructured school settings.

The loose relationship between teacher education programs and public schools makes the student teaching experience irrelevant at best; at worst, it reinforces the status quo in teaching and begins the process of convincing new teachers to leave the profession.

The school-university relationship can be strengthened in many ways, but particularly by forging links between research, reform, and teaching. In model reform efforts in the schools, for example, teachers are developing many innovative classroom practices that can be incorporated into teacher education programs. Conversely, researchers in colleges and universities can work more systematically to make research available in applied form to the practice of current and future teachers. For a more direct link between research and teaching, researchers can engage teachers in developing research topics and collecting and interpreting data. The key is for researchers to understand that teachers possess a tremendous amount of experiential knowledge, and they expect to be treated as equals in any partnership.

Another important goal is to develop in teacher education programs some means of methodically following up graduates. This would benefit both the program and the graduates. New teachers are in a unique position to help faculty reflect on the effectiveness of the teacher education program, and they should be part of any evaluation and reform.

THE TASK AHEAD

Despite many of the achievements of the current school reform movement, schooling in America is still in serious trouble. Goodlad's recommendations in *Teachers for Our Nation's Schools* offer hope. By linking school reform with reform of teacher education, the chances are substantially increased for lasting improvements in schooling.

Creating the kinds of schools the nation needs and educating the kinds of teachers those schools need mean concentrated, serious work for at least the next two decades. Part of the effort must take into account the changing demographics of the student population and the changing social context of schooling. The successful simultaneous reconstruction of teacher education and the schools will require diligence, careful management, resources, and patience. An even more important requirement will be the ability and willingness to think clearly and stay the course.

WHAT BUSINESS LEADERS CAN DO TO HELP

The problems facing teacher education can be solved only by sustained reform, linked closely to dramatic efforts to restructure elementary and secondary schooling. Educators can restructure teacher education only by changing in a fundamental way both the academic education and the practical experiences of future teachers.

As the joint effort to reform teacher education and schools gathers momentum, business leaders will have many opportunities to participate in the partnership that Goodlad envisions. He considers business to be an integral ally of education.

Putting together a company program to support the reform of teacher education, as with any aid-to-education program, involves three steps: First, know the issues, and under what conditions and with what success they can be addressed. Second, choose options or entry points most suited to company expectations and needs, to the needs of future teachers, and to the larger teacher education context. And third, manage the program well by developing a clearly focused strategy, monitoring its progress, and recording its effectiveness. Businesses that make a commitment to evaluate and document their programs will be creating a much-needed (and largely nonexistent) body of information about what does and does not work, and under what conditions. That kind of information will prove invaluable to others searching for ways to move more efficiently through the change process.

The preceding pages were intended to contribute to the business community's knowledge about major issues and goals of teacher education. The following section describes specific suggestions of ways corporate funders, concerned about the quality of classroom teachers, can develop and support appropriate projects to promote better teacher preparation.

1. Help design more effective general education curricula.

Business leaders are understandably reluctant to recommend how faculty should develop curricula or plan a coherent, sequenced preteaching program. However, they can play a role in improving core curricula for future teachers, as well as for elementary and high school students. The following strategies suggest how.

- **Link core curricula for teachers to specialists in the fields.** Teacher education for elementary and secondary teachers must include preparation in subject-area content as well as how the subject is structured and how it is taught. Future teachers need both a solid grounding in academic subjects and an understanding of how best to teach subjects to diverse students in different grades. Business leaders can be useful in helping to bring subject-area specialists (practitioners and academics) more fully into teacher education programs to strengthen the content, structure, and sequence of courses, to improve curricula, create model courses, and set up pilot sites.
- **Develop case studies for future teachers.** Business people are certainly familiar with the case-study method of teaching popularized by the Harvard Business School in its MBA program. Spurred by research conducted at Pace and Stanford universities, many teacher education programs are beginning to use case studies, but the number of quality studies available is limited. Business leaders can help develop, write, and evaluate case studies for use with current and future teachers.
- **Identify workplace skills.** The gap between what employers need from entry-level workers and how schools prepare these workers continues to widen. Business leaders can work with teacher educators and school leaders to identify needed workplace skills and attitudes, so that these can be incorporated into the restructured curricula of teacher education and the public schools. Teachers should not have to wait until their school is "adopted" by a business to learn that employers seek versatile, adaptable workers with strong analytic, quantitative, communication, and decision-making skills, but evidence shows that

such a list of employee qualities surprises even veteran teachers. They expect a corporation to define ideal workers far more narrowly and consequently do not prepare young people adequately for the changing workplace. If companies would communicate their needs at the time teachers are being educated, then teachers would have more realistic ideas of the kinds of skills they should cultivate in their students.

- **Encourage state education policy decisions that promote an excellent general education and a structured academic program for future teachers.** As learned through school reform efforts, business has the power to bring difficult education issues to the attention of state and local officials, and to influence creative approaches to solving them. Unless state education policies are revised to ensure that future teachers are provided a rigorous and challenging education, and that they are carefully educated to teach what they know well to their students, teacher education reform will never happen.

2. Make sure teachers know a variety of ways to teach.

Training on the job is the forte of the business community. The proposed reforms calling for sustained professional education through practice and analysis should provide a close fit for companies interested in supporting teacher education reform.

- **Expand knowledge about how best to teach certain subjects.** Businesses can focus on their "seed corn" disciplines, those subjects most important to the continued health of the industry, and help teachers and researchers develop the most effective methods for teaching these disciplines and evaluating students' mastery of the subjects. For example, most business people are familiar with the concern that far too few females, Native-, African-, and Hispanic-Americans are in the mathematics, science, and technology pipeline. These groups do not take the necessary courses in elementary and secondary schools, they do poorly in the less-challenging courses they do take, and they major in nontechnical fields in college, if they attend college. They simply are unqualified when industry seeks to hire for technical jobs. Business can help find answers to questions that

might illuminate the problem: How early do these students drop out of the pipeline? Could different strategies in elementary school science or math teaching make a difference? What ways will keep students of various ages and different backgrounds interested and motivated in technical subjects?

- **Set up an individual partnership program between employees and teacher education programs.** Business people frequently complain that teachers do not understand the real world (that is, business) and, therefore, cannot prepare students adequately to participate in it. While many companies provide company mentors and part-time work for students, and others hire teachers as summer interns, none is known to work directly with future teachers or teacher educators to help them learn ways to connect the subjects they teach to the world around them.

Many links between school subjects and corporate activities are natural. For example, science, mathematics, and computer teachers link with technical, scientific, and laboratory personnel; writing and language arts with marketing and office management; history, social sciences, and political science with governmental affairs; vocational education and home economics with education and job training; counseling with human resources. Teachers, and the teachers of teachers, could benefit greatly by learning practical applications of the skills and knowledge they teach.

3. Create a model teacher education program.

The business community is not likely to have—nor should it have—a direct impact on the internal norms and priorities of colleges and universities. Indirectly through donations, endowments, and scholarships, however, business can help enhance the prestige of teaching.

- **Help create effective clinical schools.** Using the model of teaching hospitals, many schools of education are beginning to establish relationships with local school districts to set up special schools that provide student teachers with extended, well-supervised

experiences in classroom teaching and school interactions. These programs are known by various names: clinical schools, professional development schools, professional practice schools. These schools require long-term commitments of time, energy, patience, cooperation, and effort from school system teachers, administrators, and staff, and from university faculty and administrators. Companies, especially those who enjoy partnerships with individual schools, should seriously consider working closely with or helping establish clinical schools to support effective programs for preparing future teachers.

- **Assist in creating a Center for Pedagogy on campus.** To establish the prototype teacher education programs proposed by Goodlad, colleges and universities must completely restructure the way they recruit and reward faculty, recruit and support students, design curricula, develop admission and graduation requirements, and work with local school systems. Business leaders can support such restructuring through investments of resources and talent. Both short-term individual projects and long-term reform efforts can use such support.

- **Make sure teacher education is firmly grounded in research.** Social and behavioral science research and educational research provide a substantial and essential body of information about how children develop and learn, yet such knowledge rarely is integrated systematically into teacher preparation or practice. On a large scale, business can fund work on the professional knowledge base within a consortium of institutions developing prototype centers for pedagogy. On a smaller scale, business can support projects to consolidate knowledge about how best to teach one or more subjects of special interest to an industry. Examples include funding literature reviews or creating bibliographies and classification schemes of current research.

4. Recruit top-quality students.

Although the numbers may vary from report to report, it seems clear that America's schools face an impending teacher shortage in the near future, especially in mathematics and

science and among minority groups. To increase the number of top-quality, committed teachers in the nation's classrooms, business must help teacher education programs recruit excellent students and develop effective retention programs to support them during their teacher preparation.

- **Provide scholarships and fellowships to future teachers.** Many companies offer special scholarship programs to attract young people into teaching, but more programs are needed. In some scholarship programs, students are identified early in high school and given additional academic support through special tutoring or mentoring programs. Often scholarship and fellowship programs are tailored for specific audiences (for example, underrepresented minorities) and/or specific subject areas (mathematics, science, technology).
- **Improve the capacity to recruit and graduate more minority teachers.** Increasing the number of minority teachers is a two-fold problem. At the college level, business can help teacher education programs provide effective support services, academic development programs, and career counseling for their minority students. These kinds of programs help assure success. At the elementary and secondary levels, similar academic, counseling, and support programs are needed to assure that minority students are well prepared for college.

5. Link teacher education with school reform.

Many, if not most, of the exciting and innovative ideas being tried in classrooms around the country are neither modeled nor described in teacher education programs. As a result, new teachers reach their first classroom knowing little about the issues of school reform and efforts to address them. Business can help bridge the gap in several ways.

- **Create networks to link clinical school/university partnership programs.** Networks that link clinical school/teacher education partnership programs in one part of the country with those in other parts are essential to the exchange of innovative ideas and research. Business can help, for example, by improving or establishing computer and facsimile networks, by underwriting the production of newsletters and other printed materials, and by sponsoring conferences and seminars.

- **Develop linkages between nonpartner school districts and teacher education programs.** Many schools and school districts will never be associated with a formal teacher education partnership. Yet, these schools also are restructuring their programs, and their teachers have important experiences to share with teacher educators. By establishing computer linkages, developing exchange programs, and so forth, business can encourage links between these creative, and often isolated, programs and future teachers to promote the best classroom practices. Such linkages can help teachers dispel some of the professional loneliness that comes with the job, and give them opportunities to honor each others' accomplishments.

- **Fund research in which teachers participate in defining, collecting, and interpreting data.** Research faculty from colleges and universities usually analyze teaching and learning through academic rather than applied research, observing but not engaging in the daily process of teaching. It would be useful to augment their research with field studies conducted by practicing teachers, who possess a wealth of experiential knowledge. Teachers would benefit in this process by discovering relationships between how they teach and how their students learn.

- **Develop new assessment models based on new definitions of excellent teaching.** Attempts to reform teacher education are hindered by a mismatch between the vision of empowered teachers and the tools available to measure teacher effectiveness. Neither old nor new teachers will practice excellent teaching if their performance evaluations are based on how quiet their classrooms are, or on whether they have reached the assigned page in the curriculum manual by October 10. It is imperative to measure how well teachers perform by standards that reflect the type of teaching and learning desired. Performance evaluators need to extend the way they assess teachers, for example, by learning to recognize how teachers coach students successfully, lead students to think independently, and organize classes to encourage cooperative learning and group work. Drawing from their experience in performance assessment, business leaders can help develop better ways to assess teachers.

THE BUSINESS APPROACH TO TEACHER EDUCATION REFORM

Putting together a company program to support teacher education reform involves two kinds of calculations: one to determine the program focus, and the other to determine the kinds of resources (money, staff time, CEO involvement, and so forth) that will be committed to the program. These calculations are neither mutually exclusive nor sequential; program planners must consider both simultaneously and consider how one affects the other.

Making choices among strategies and options is a matter of balancing corporate and community needs and expectations. A program consonant with a company's work force needs, its corporate style, or its existing education-support interests is more likely to be sustained over time.

The approaches outlined in this guide should be regarded as illustrative rather than comprehensive. In the next few years, much more effort must be placed into developing grant-making programs that offer real support for the teacher education reform agenda. More than anything else, however, prospective corporate funders must work hard to take the long view.

RESOURCES

For more information on teacher education reform and how business leaders can assist, please contact:

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